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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,772	06/18/2001	Yatin R. Acharya	95-506	8239

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EXAMINER

LEE, ANDREW CHUNG CHEUNG

ART UNIT PAPER NUMBER

2664

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/881,772

Applicant(s)

ACHARYA, YATIN R.

Examiner

Andrew C Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>Aug 07 2001</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

Fig.2, page 4, lines 26 – 27, the referenced elements “ post-link module” and “media access control (MAC) module”; page 8, the referenced elements “a link layer control module 72” in line 1, line 7, lines 11 – 13, respectively; the referenced elements “MAC module 46”, in line 16 and line 17, respectively; the referenced element “a transmission module 74” in line 18. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:

- Page 3, line 15, there should be a space between “1is”.

- Page 9, lines 18 – 27, the Office would request the Applicant to clarify this description of Figures 2 and 3. The Office suggests that it would be more appropriate (lines 18 – 27) description is for Figures 1 and 4.
- Fig.4, there is a typo in referenced element 99, "IP to Inifi Band" should be "IP to InfiniBand"

Appropriate correction is required.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1 – 3, 5 – 7, 9 – 13 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 – 11 of U.S. Patent No. 6459698 B1.

Regarding claim 1,

a router configured for sending and receiving data packets on an InfiniBand™ network, the router being configured to receive an Internet Protocol (IP) data packet having a transport header having an IP header including a type of service (TOS) field having a differentiated services code point value indicative of layer 3 priority data of the IP packet, the router comprising (see U.S. Patent 6459698 B1, column 8, lines 36 – 42);

a mapping table having multiple entries, each entry specifying an application identifier and a corresponding service level (see U.S. Patent 6459698 B1, column 8, lines 43 – 45), and

a controller configured for parsing the TOS field and determining the service level for the differentiated services code point value, the controller outputting the network layer packet on the InfiniBand™ network within an InfiniBand™ packet according to the determined service level (see U.S. Patent 6459698 B1, column 8, lines 46 – 51).

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Regarding claim 2,

claim 2 disclosed is identical to U.S. Patent No. 6459698 B1 claim 2 (column 8, lines 52 – 54).

Regarding claim 3,

claim 3 disclosed is identical to U.S. Patent No. 6459698 B1 claim 3 (column 8, lines 55 – 59).

Regarding claim 5,

a method of outputting an IP packet, received by a router, onto an InfiniBandTM network, the method comprising (see U.S. Patent 6459698 B1, column 8, lines 60 – 62):

receiving, by the router, an Internet Protocol (IP) data packet having an IP header including a type of service (TOS) field specifying a differentiated services code point value (see U.S. Patent 6459698 B1, column 8, lines 63 – 66);

parsing the TOS field and mapping the differentiated services code point value to a determined service level based on the parsed TOS field (see U.S. Patent 6459698 B1, column 9, lines 1 – 3):

and outputting the IP packet on the InfiniBandTM network within an InfiniBandTM packet according to the determined service level (see U.S. Patent 6459698 B1, column 9, lines 4 – 6).

Regarding claim 6,

the method of claim 5, further including, prior to outputting step, the step of mapping the service level to a virtual lane and establishing an InfiniBandTM packet header including a virtual lane field that contains priority data relating to the priority data of the IP packet (see U.S. Patent 6459698 B1, column 9, lines 7 – 11).

Regarding claim 7,

the method of claim 5, wherein, prior to the parsing step, the method includes populating within the router a differentiated services code point to service level mapping table with differentiated services code point values and corresponding service level numbers (see U.S. Patent 6459698 B1, column 9, lines 12 – 16).

Regarding claim 9,

A router configured for sending and receiving data packets on an InfiniBandTM network, the router being configured to receive an Internet Protocol (IP) data packet having an IP header including a type of service (TOS) field having a differentiated services code point value indicative of layer 3 priority data of the IP packet, the router comprising (see U.S. Patent 6459698 B1, column 9, lines 17 – 23):

means for a mapping a differentiated services code point value to a corresponding service level (see U.S. Patent 6459698 B1, column 10, lines 1 – 2)., and

means for parsing the TOS field and determining the service level for the differentiated services code point value, and for outputting the IP packet on the

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InfiniBand™ network within an InfiniBand™ packet according to the determined service level (see U.S. Patent 6459698 B1, column 9, lines 3 – 7).

Regarding claim 10,

The router of claim 9, wherein the means for mapping is a mapping table having multiple entries, each entry specifying a differentiated services code point value and a corresponding service level (see U.S. Patent 6459698 B1, column 9, lines 4 – 6).

Regarding claim 11,

claim 11 disclosed is identical to U.S. Patent No. 6459698 B1 claim 9 (column 10, lines 12 – 13).

Regarding claim 12,

claim 12 disclosed is identical to U.S. Patent No. 6459698 B1 claim 10 (column 10, lines 14 – 16).

Regarding claim 13,

claim 13 disclosed is identical to U.S. Patent No. 6459698 B1 claim 11 (column 10, lines 17 – 21).

5. For claims 1, 5, 6, 7, 9, 10, Applicant merely broadens the scope of U.S. Patent No. 6459698 B1 claims 1, 4, 5, 6, 7, 8 by replacing the referenced terms — “an Internet

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Protocol" with "a network layer", "an IP header including a type of service (TOS) field having a differentiated services code point value indicative of layer 3 priority data of the IP packet " with "an application identifier indicative of application layer priority data of the network layer packet ", "TOS field" with "a network layer", "differentiated services code point value" with "application identifier" in claim 1 of the patent (No. 6459698 B1); "an IP " with "a network layer", "an Internet Protocol (IP)" with "a network layer ", "an IP header including a type of service (TOS) field" with "a transport header", "a differentiated services code point value" with "an application identifier", "TOS field" with "transport header", "differentiated services code point value" with "application identifier", "IP" with "network layer" in claim 4 of the patent (No. 6459698 B1); "IP " with "network layer " in claim 5 of the patent (No. 6459698 B1); "differentiated services code point" with "application identifier", "differentiated services code point" with "application identifier" in claim 6 of the patent (No. 6459698 B1); "an Internet Protocol (IP)" with "a network layer", "an IP header including a type of service (TOS) field having a differentiated services code point value indicative of layer 3 priority data of the IP packet" with "a transport header specifying an application identifier indicative of application layer priority data of the network layer packet", "a differentiated services code point value" with "an application identifier", "TOS field" with "transport header", "differentiated services code point value" with "application identifier", "IP" with "network layer" in claim 7 of the patent (No. 6459698 B1); "a differentiated services code point value " with "an application identifier " in claim 8 of the patent (No. 6459698 B1);

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to (703) 305-8086 whose telephone number is (703) 305-8086. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (703) 305-4366. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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30 December 2004


Ajit Patel
Primary Examiner